



Antifreeze Waste Management Guide

Hazardous Waste Program fact sheet

6/2006

What is the regulatory status of waste antifreeze?

Waste antifreeze is not a listed hazardous waste under the federal hazardous waste regulations in 40 CFR 261 Subpart D, but antifreeze may contain metals, particularly lead, and other substances that would cause it to be classified as a characteristic hazardous waste (40 CFR 261 Subpart C). However, recent studies have shown that antifreeze from late-model cars and trucks does not exhibit hazardous characteristics. This is primarily due to reduced lead use in radiator construction. Additionally, automotive shops routinely blend and bulk antifreeze from various sources for storage and eventual disposal which results in the dilution of the hazardous constituent to nonhazardous levels.

References:

10 CSR 25-5.262(l), incorporating 40 CFR 262.11.

Waste Management Options:

Based on the state and federal regulations cited above, prior to disposal, a generator of solid waste must determine, either by knowledge of the waste antifreeze constituents or by appropriate testing, whether waste is hazardous. Knowledge of the waste stream, as applied to the total volume of spent antifreeze generated, is an appropriate alternative to testing the spent antifreeze. Bulking waste antifreeze from various sources is allowed by regulations. The bulked mixture of spent antifreeze is presumed to be nonhazardous as long as it is not mixed with other listed or characteristic wastes. Therefore, automotive shops and small businesses that bulk antifreeze primarily from late-model cars and trucks may use knowledge rather than testing to identify their antifreeze waste stream as nonhazardous. A Missouri Resource Recovery Certification is not required for recycling nonhazardous antifreeze from cars, trucks, and other standard sources. A recycler who accepts antifreeze from such sources may notify the Missouri Department of Natural Resources' Hazardous Waste Program at 1-800-361-4827 or (573) 751-3176 if they wish to be placed on a list of recyclers that will be available to the public.

Radiator repair shops managing waste antifreeze primarily used in heavy equipment or industrial sources may find toxic levels of lead in their waste antifreeze. This antifreeze must be characterized. If the antifreeze is found to contain lead or other hazardous constituents above regulated levels, it is hazardous waste and is subject to hazardous waste management requirements for on-site handling, transportation and disposal. A Missouri Resource Recovery Certification is required for recycling antifreeze from such sources. An application form for a Missouri Resource Recovery Certification may be obtained by calling the department's Hazardous Waste Program at 1-800-361-4827 or (573) 751-3176.

All recyclers, whether or not they require certification, must characterize any residues from the distillation or recycling of spent antifreeze to determine if they are hazardous wastes. If the residues are hazardous, the recycler must comply with all applicable state and federal hazard-

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ous waste regulations including land disposal restrictions and requirements of 40 CFR Part 268. Assuming that the residues are hazardous metal-bearing/high-BTU wastes, these residues may be transported (with a hazardous waste manifest and land disposal restriction notification) to a permitted hazardous waste combustion unit for treatment. The final treatment facility would certify compliance with the applicable treatment standards prior to disposal of the residues.

The Missouri Department of Natural Resources encourages the prudent recycling of all waste antifreeze. However, if a batch of waste antifreeze is nonhazardous, it may be solidified to the point that no free liquids remain, and the wastes may then be disposed of at a sanitary landfill. Also, if the facility is connected to a sanitary sewer that discharges to a Publicly Owned Treatment Works (POTW) and the wastes will mix with domestic sewage, the waste antifreeze may be disposed in the sanitary sewer on-site. Before such disposal, the POTW should be contacted to verify that they allow waste antifreeze in their system. Waste antifreeze may never be discharged to storm sewers, septic systems, streams, or be dumped on the ground.

Caution is warranted for those who purchase recycled antifreeze from dealers. Some unscrupulous dealers have been reported who do not actually recycle the antifreeze before resale or who may sell contaminated products as antifreeze. You are advised to check on the credentials and processes of your antifreeze dealer or recycler prior to purchase.

Please note that this guidance is not intended for use by interim status or permitted hazardous waste treatment, storage or disposal facilities.

For more information call or write:

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Hazardous Waste Program
P.O. Box 176, Jefferson City, MO 65102-0176
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(573) 751-7869 fax
www.dnr.mo.gov/env/hwp Program Home Page